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### **SUPPLEMENTAL NOTICE OF ALLOWANCE**

This Supplemental Notice of Allowance corrects minor errors made in the previous Notice of Allowance. Namely, this corrects the improper indication that claim 17 was canceled. Claim 17 should have been indicated as being allowed and amended as recited on page 4 of the Notice of Allowance dated 11/30/09. Furthermore, this amendment also amends claims 25 to correct the dependency of the claim. Claim 25 was dependant on a canceled claim and has been amended to correct this dependency. The entire Examiner's Amendment, mail 11/30/09, has been recited below along with the amendment to claim 25.

### **EXAMINER'S AMENDMENT**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Joseph Baker on November 19, 2009.

The application has been amended as follows:

Claims 1 , 3, 5, 7, 9-10, 14, 16, 18, 20, 22-23 are canceled.

The following claims have been amended.

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2. ~~The A method of claim 1, for inhibiting the spread and/or reducing the risk of infection of a virus comprising contacting a virus with an inhibiting effective amount of a cathelicidin functional fragment~~, wherein the cathelicidin functional fragment ~~comprises~~ consists of 16-~~[[36]]20 or 26-30~~ amino acids in length; and contains the sequence ~~sequence~~  $X_1X_2X_3X_4X_5X_6IKX_7FX_8X_9X_{10}LX_{11}P$  (SEQ ID NO:1), wherein  $X_1$ ,  $X_2$ , and  $X_6$  are individually K or R; wherein  $X_3$  is I or K; wherein  $X_4$  is V or G; wherein  $X_5$  is Q or R; wherein  $X_7$ ,  $X_9$ ,  $X_{10}$ , and  $X_{11}$  are each individually any amino acid; wherein  $X_8$  is L or F and wherein the polypeptide comprises antimicrobial and/or antiviral activity.

4. The method of claim ~~[[3]]~~ 2, wherein the peptide comprises of a sequence selected form the group consisting of:

- (a) KRIVQRIKDFLRNLVP (SEQ ID NO:13);
- (b) KRIVQRIKDFLRNLVPR (SEQ ID NO:14);
- (c) KRIVQRIKDFLRNLVPRT (SEQ ID NO:15);
- (d) KRIVQRIKDFLRNLVPRTE (SEQ ID NO:16); and
- (e) KRIVQRIKDFLRNLVPRTES (SEQ ID NO:17).

6. The method of claim ~~[[6]]~~ 2, wherein the peptide comprises a sequence selected from the group consisting of:

- (a) KSKEKIGKEFKRIVQRIKDFLRNLVP (SEQ ID NO:18);
- (b) KSKEKIGKEFKRIVQRIKDFLRNLVPR (SEQ ID NO:19);
- (c) KSKEKIGKEFKRIVQRIKDFLRNLVPRT (SEQ ID NO:20);
- (d) KSKEKIGKEFKRIVQRIKDFLRNLVPRTE (SEQ ID NO:21); and
- (e) KSKEKIGKEFKRIVQRIKDFLRNLVPRTES (SEQ ID NO:22).

8. ~~The A method of claim 7, for inhibiting the spread and/or reducing the risk of infection of a virus comprising contacting a virus with an inhibiting effective amount of a cathelicidin functional fragment~~, wherein the ~~peptide fragment~~ ~~comprises~~ consists of a sequence selected form the group consisting of:

- (a) RKSKEKIGKEFKRIVQRIKDFLRNLVP (SEQ ID NO:23);
- (b) RKSKEKIGKEFKRIVQRIKDFLRNLVPR (SEQ ID NO:24);

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- (c) RKSKEKIGKEFKRIVQRIKDFLRNLVPRT (SEQ ID NO:25);
- (d) RKSKEKIGKEFKRIVQRIKDFLRNLVPRTE (SEQ ID NO:26);
- (e) RKSKEKIGKEFKRIVQRIKDFLRNLVPRTES (SEQ ID NO:27)
- (f) LGDFFRKSKEKIGKEFKRIVQRIKDFLRNLVPRTES (SEQ ID NO:28).

15. ~~The A method of claim 14, for treating atopic dermatitis comprising contacting a subject having or suspected of having atopic dermatitis with an inhibiting effective amount of a cathelicidin functional fragment~~, wherein the cathelicidin functional fragment ~~comprises~~ consists of 16-~~[[36]]~~20 or 26-30 amino acids in length; and contains the sequence  $[[\text{NH}_2\text{-}]]\text{X}_1\text{X}_2\text{X}_3\text{X}_4\text{X}_5\text{X}_6\text{IKX}_7\text{FX}_8\text{X}_9\text{X}_{10}\text{LX}_{11}\text{P}[[\text{-COOH}]]$  (SEQ ID NO:1), wherein  $\text{X}_1$ ,  $\text{X}_2$ , and  $\text{X}_6$  are individually K or R; wherein  $\text{X}_3$  is I or K; wherein  $\text{X}_4$  is V or G; wherein  $\text{X}_5$  is Q or R; wherein  $\text{X}_7$ ,  $\text{X}_9$ ,  $\text{X}_{10}$ , and  $\text{X}_{11}$  are each individually any amino acid; wherein  $\text{X}_8$  is L or F and wherein the polypeptide comprises antimicrobial and/or antiviral activity.

17. The method of claim ~~[[16]]~~ 15, wherein the peptide comprises a sequence selected from the group consisting of:

- (a)  $[[\text{NH}_2\text{-}]]\text{KRIVQRIKDFLRNLVP}[[\text{-COOH}]]$  (SEQ ID NO:13);
- (b)  $[[\text{NH}_2\text{-}]]\text{KRIVQRIKDFLRNLVPR}[[\text{-COOH}]]$  (SEQ ID NO:14);
- (c)  $[[\text{NH}_2\text{-}]]\text{KRIVQRIKDFLRNLVPRT}[[\text{-COOH}]]$  (SEQ ID NO:15);
- (d)  $[[\text{NH}_2\text{-}]]\text{KRIVQRIKDFLRNLVPRTE}[[\text{-COOH}]]$  (SEQ ID NO:16); and
- (e)  $[[\text{NH}_2\text{-}]]\text{KRIVQRIKDFLRNLVPRTES}[[\text{-COOH}]]$  (SEQ ID NO:17).

19. The method of claim ~~[[18]]~~ 15, wherein the peptide comprises a sequence selected from the group consisting of:

- (a)  $[[\text{NH}_2\text{-}]]\text{KSKEKIGKEFKRIVQRIKDFLRNLVP}[[\text{-COOH}]]$  (SEQ ID NO:18);
- (b)  $[[\text{NH}_2\text{-}]]\text{KSKEKIGKEFKRIVQRIKDFLRNLVPR}[[\text{-COOH}]]$  (SEQ ID NO:19);
- (c)  $[[\text{NH}_2\text{-}]]\text{KSKEKIGKEFKRIVQRIKDFLRNLVPRT}[[\text{-COOH}]]$  (SEQ ID NO:20);
- (d)  $[[\text{NH}_2\text{-}]]\text{KSKEKIGKEFKRIVQRIKDFLRNLVPRTE}[[\text{-COOH}]]$  (SEQ ID

NO:21); and

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(c)  $[[\text{NH}_2-]]\text{KSKEKIGKEFKRIVQRIKDFLRNLVPRTES}[[\text{-COOH}]]$  (SEQ ID NO:22).

21. ~~The A method of claim 20, for treating atopic dermatitis comprising contacting a subject having or suspected of having atopic dermatitis with an inhibiting effective amount of a cathelicidin functional fragment, wherein the peptide fragment comprises~~ consists of a sequence selected from the group consisting of:

- (a)  $[[\text{NH}_2-]]\text{RKSKEKIGKEFKRIVQRIKDFLRNLVP}[[\text{-COOH}]]$  (SEQ ID NO:23);
- (b)  $[[\text{NH}_2-]]\text{RKSKEKIGKEFKRIVQRIKDFLRNLVPR}[[\text{-COOH}]]$  (SEQ ID NO:24);
- (c)  $[[\text{NH}_2-]]\text{RKSKEKIGKEFKRIVQRIKDFLRNLVPRT}[[\text{-COOH}]]$  (SEQ ID NO:25);
- (d)  $[[\text{NH}_2-]]\text{RKSKEKIGKEFKRIVQRIKDFLRNLVPRTE}[[\text{-COOH}]]$  (SEQ ID NO:26);
- (e)  $[[\text{NH}_2-]]\text{RKSKEKIGKEFKRIVQRIKDFLRNLVPRTES}[[\text{-COOH}]]$  (SEQ ID NO:27).
- (f)  $\text{LGDFFRKSKEKIGKEFKRIVQRIKDFLRNLVPRTES}$  (SEQ ID NO:28).

24. The method of claim ~~[[14]]~~ 15 or 21, wherein the subject also is infected with a viral infection, wherein the virus is selected from a pox virus, a herpes virus, vaccinia virus, and pappiloma virus.

25. The method of claim ~~[[14]]~~ 15 or 21, wherein the contacting is in vivo.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANISH GUPTA whose telephone number is (571)272-0965. The examiner can normally be reached on 5/4/9.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tsang Cecilia can be reached on 571-272-0562. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Anish Gupta/  
Primary Examiner, Art Unit 1654